## PUNCH TOOLING







### Di-Acro, Incorporated

PO Box 9700 Canton, Ohio 44711 3713 Progress Street N.E. Canton, Ohio 44705 330-455-1942 330-455-0220 (fax) Revised 01/02

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-Non-Keyed Turret Punches and Dies

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-Keyed Turret Punches and Dies

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- Adjustable Punch and Die Holders

#### **MINIMUM ORDER \$50.00**

### INTERCHANGEABILITY 901 SERIES CAPABILITIES

Di-Acro punches and dies will accommodate W.A. Whitney presses that use No. 2 and 28 Whitney tooling. The 901 Series also fits Roper Whitney presses that utilize No. 8 and 28 tooling. This series will comply with many types of punching equipment of other manufacturers.

#### **SINGLE STATION PUNCHES** SINGLE STATION DIES **DI-ACRO** ROPER WHITNEY **DI-ACRO ROPER WHITNEY** W.A. WHITNEY NO. 20 Α 15/10 2-3/8" 2-3/8" В NO. 40 NO. 2 NO. 8 NO. 2 С NO. 28 15/16 3-1/8" 1-5/32 D NO. 28 NO. 28 NO. 28 NO. 4 4-3/4"\_ Ε NO. 28

### DI-ACRO SINGLE STATION 901 SERIES PUNCHES & DIES

Di-Acro single station tools are designed for use in Di-Acro single station punch presses No. 1 and 2.

**TWIN SHEAR**- All punches requiring more than 4 tons to punch 16 gauge mild steel (13/16 round or equivalent irregular size) are ground with twin shear. Twin shear reduces necessary power about 50%. Punches 13/16" or larger are also available without twin shear. Consult Factory for pricing.

**CENTER POINT**- All single station punches from 1/8" and up are provided with a centering point. This feature is best suited for accurate layout work, or for hole location. Additional charge to remove center point.

**CLEARENCE**- Single station punches and dies are provided with a standard clearance of .007" - .008" (15% of 16 ga. material). Special clearances greater than .004" Can be supplied at no additional cost.

**BLANKING DIES**-In operations where the slug must be retained, Di-Acro can furnish the punch and die set to your specifications. For blanking, the punch is ground flat.



**PUNCH NO. 2-**Made to a maximum of 1/2" round or a shape that is within the perimeter of 1/2" diameter.

**PUNCH NO. 4-**Made from 1/2" to a maximum of 4" round, or a shape that is within the perimeter of 4" diameter.



Punch Paks are assortments of commonly-used punches and dies stored in hard metal containers. These Punch Paks eliminate production delays, save lost time looking for the right sizes, or having to order special.

**PUNCH PAK NO. 1-**contains 30 sizes of round punches and dies, 3/64" through 1/2" in increments of 1/64". Net Wt. 13lbs., Ship Wt. 18lbs.



**PUNCH PAK NO. 2-**contains 8 rounds, in sizes 1/16" through 1/2" in increments of 1/16"; 12 rounds, in sizes 1/2" through 2" in increments of 1/8"; 4 squares, in 1/2", 5/8", 3/4" and 1". Net Wt. 38 lbs. Ship Wt. 45 lbs.

CAT NO. 901802-000



#2 Punch



### 901 SERIES SINGLE STATION PUNCHES & DIES

#### SINGLE STATION PUNCHES

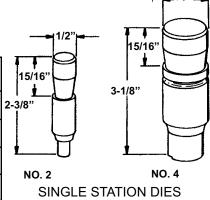
### **ROUND**

PUNCHES

PUNCHES

MAX
TYLE SIZE CAT. NO. STYLE DIAM. O.D.

STYLE	SIZE	CAT. NO.	STYLE	MAX DIAM.	O.D.	CAT. NO.
2	.063"500"	901009-000	Α	.508"	1.250"	901030-000
4	.501" – 1.000"	901010-000	Α	.758"	1.250"	901030-000
4	1.001" – 1.437"	901011-000	В	1.445"	2.125"	901032-000
4	1.438" – 2.000"	901012-000	С	2.008"	2.750"	901034-000
4	2.001" - 2.500"	901013-000	D	2.508"	3.750"	901036-000
4	2.501" - 3.000"	901014-000	D	3.008"	3.750"	901036-000
4	3.001" – 3.500"	901015-000	E	3.508"	4.750"	901038-000
4	3.501" – 4.000"	901016-000	Е	4.008"	4.750"	901038-000



.1-1/4"—|DIE A

1/32" thru 1-7/8" 5/8"

2-1/8" DIE B



## 1-15/32" thru 2"

### **STANDARD SHAPED SERIES**

PUNCHES DIES

STYLE	DIAG. DIMENSION	CAT.NO.	STYL	.E	MAX DIAG.	O.D.	
2	063"500"	901048-xxx	Α		.508"	1.250"	
4	.501" – 1.000"	901050-xxx	Α		.758"	1.250"	
4	1.001" – 1.4375"	901051-xxx	В		1.445"	2.125"	
4	1.438" – 2.000"	901052-xxx	С		2.008"	2.750"	
4	2.001" - 2.500"	901053-xxx	D		2.508"	3.750"	
4	2.501" - 3.000"	901054-xxx	D		3.008"	3.750"	
4	3.001" – 3.500"	901055-xxx	Е		3.508"	4.750"	
4	3.501" – 4.000"	901056-xxx	E		4.008"	4.750"	

3-3/4"
DIE D

2-1/32" thru 3"

1-5/32"

DIE E

3-1/16" thru 4"

-5/32"

Common Shape - P.O.R.

\*Shaped die openings are within the perimeter of die style dimensions

CAT. NO.

901070-xxx 901070-xxx

901072-xxx 901074-xxx

901076-xxx

901076-xxx

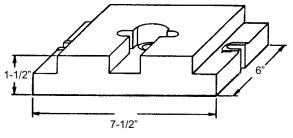
901078-xxx

901078-xxx

### SINGLE STATION PUNCHES & DIES 901 SERIES

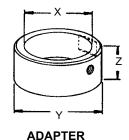
### **DIE HOLDERS**

The die holder is mounted on either the No. 1 or No. 2 Di-Acro punch press, and is available in sizes to accomodate the five die styles. Certain die holders with large I.D. s will utilize dies with a smaller O.D. if fitted with the proper adapter.

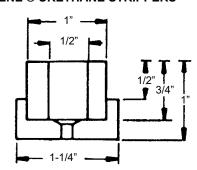


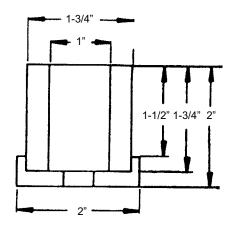
901 SERIES DIE HOLDER

DIE HOLDER STYLE	CAT. NO.	BORE IN HOLDER	ACCOMMODATES DIE STYLE
Α	8140150-270	1 1/4"	Α
В	8240150-270	2 1/8"	В
С	8040150-270	2 3/4"	С
D	8340150-270	3 3/4"	D
E	8440150-270	4 3/4"	E



#### **K-PRENE ® URETHANE STRIPPERS**





### **DIE ADAPTERS**

ADAPTER STYLE	CAT. NO.	Х	Y		FITS DIE HOLDER
Α	8040150-375	1 1/4"	2 3/4"	1 5/32"	С
В	8000150-375	2 1/8"	2 3/4"	1 5/32"	С

### **PUNCH HOLDERS**

STYLE	CAT. NO.
1"	8040150-102

<sup>\*</sup>Standard with Di-Acro Single Station Punch Nos. 1 and 2.

### **K-PRENE ® URETHANE STRIPPERS**

PUNCH STYLE	CAT. NO.	RANGE
2	8273110-280	Up to 1/2"
4	8100100-080	1/2" to 1"

### **K-PRENE ® URETHANE STRIPPERS**

PUNCH STYLE	CAT. NO.	RANGE
2	8273110-400	Up to 1/2"
4	8273210-800	1/2" to 1"

### 902 SERIES NON-KEYED TURRET PUNCHES & DIES

Di-Acro 902 punches and dies are designed for use in Di-Acro No. 12 and No. 18 hand turret punch presses.

TWIN SHEAR- Punches requiring more than 4 tons to punch 16 gauge mild steel (13/16" round or equivalent irregular size) are supplied with twin shear. Twin shear reduces necessary power about 50%. Punches 13/16" or larger are also available without twin shear.

CENTER POINT- Punches 1/8" or more in diameter are supplied with center point. Additional charge to remove center point.

CLEARANCE- Standard clearance is .007"-.008" (15% of 16 ga. material). Special clearance can be supplied if information is provided at the time of order. Speacial clearances greater than .004" are available at no additional cost.

BLANKING DIES- In operations where the slug is to be retained, Di-Acro can furnish the punch and die sets to your specifications. For blanking, the punch is ground flat.

STANDARD ARRANGEMENT OF ROUND PUNCHES AND DIES- Available for No. 12 and 18 hand punch presses – a package of round punch and die sets in sizes most often used.

PACKAGE 902802-000- includes the following sizes: 1/16", 1/8", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8", 7/16". 1/2", 5/8", 3/4", 13/16", 7/8", 15/16", 1", 1-1/4", AND 1-1/2".

CAT. NO.
902802-000

### **PUNCH HOLDERS**

902 SERIES	CAT. NO.		
SMALL	8060150-103		
LARGE	8000150-103		

### **DIE HOLDERS**

902 SERIES	CAT. NO.		
Α	8060150-204		
В	8000150-204		
С	8100150-204		

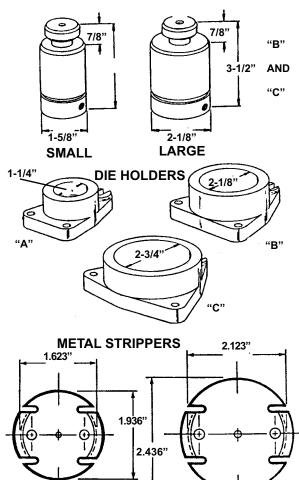
### **METAL SRTIPPERS**

SRTIPPER	CAT. NO.
SMALL	8060140-304
LARGE	8000140-304



**#18 TURRET** 

#### **PUNCH HOLDERS**

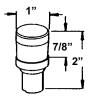


**ARGE** 

**SMALL** 

### NON-KEYED TURRET 902 SERIES PUNCHES & DIES

### **PUNCHES**



0" to 1"



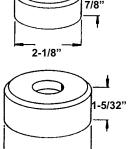
1" to 1-7/16"



1-7/16" to 2"

### **DIES**





2-3/4"

### **ROUND**

### **PUNCHES**

STYLE	SIZE	CAT. NO.
Α	.063"750"	902010-000
Α	.751" – 1.000"	902010-000
В	1.001" – 1.4375"	902012-000
С	1.438" – 2.000"	902014-000

### **DIES**

STYLE	MAX DIAM.	O.D.	CAT. NO.
Α	.758"	1.250"	901030-000
В	1.008"	2.125"	901032-000
В	1.445"	2.125"	901032-000
С	2.008"	2.750"	901034-000

### **STANDARD SHAPED SERIES**

### **PUNCHES**

STYLE	DIAG. DIMENSION	CAT. NO.
Α	.063" - 1.000"	902050-xxx
В	1.001" – 1.4375"	902052-xxx
С	1.438" – 2.000"	902054-xxx

### **DIES**

STYLE	MAX DIAG.	O.D.	CAT. NO.
Α	.758"	1.250"	901070-xxx
В	1.008"	2.125"	901072-xxx
В	1.445"	2.125"	901072-xxx
С	2.008"	2.750"	901074-xxx

Common Shape - P.O.R.

### K-PRENE ® URETHANE STRIPPERS (ROUNDS & SHAPES)

STATION	SIZE DIAGONAL	CAT. NO.
Α	.375"	8902150-800
Α	.750"	8002150-800
В	1.000"	8102150-800
B & C	1.625"	8202150-800

### 903 SERIES KEYED TURRET PUNCHES & DIES

The punches and dies of this series are keyed 0 degree to 90 degree on all shaped tooling. This feature allows for quick alignment of the punches and dies, and insures accurate burr-free punching. Keyed punches and dies must be used with special quick change punch and die holders of the 903 series or the keyed feature is lost.

903 keyed punches and dies are made for use in the Di-Acro models VT-19P, VT-19S, 18E, 18-18 N/C, and the VT-19 N/C with 903 turret. This series tooling can be adapted to the Di-Acro VT-36 stylus and the VT-36 N/C machines through the use of special adapters.

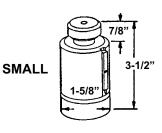
**TWIN SHEAR-** Punches requiring more than 7 1/2" tons to punch 10 gauge mild steel (13/16" round or equivalent irregular size) are supplied with twin shear. Twin shear reduces necessary power about 50%. Punches 13/16" or larger are also available without twin shear. Consult factory for pricing.

**CENTER POINT-** Punches 1/8" or more in diameter are supplied with center point. Additional charge to remove center point.

**BLANKING DIES**- In operations where the slug must be retained, Strippit can furnish punch and die sets to your specifications. For blanking, the punch is ground flat.



### **PUNCH HOLDERS**





903 SERIES	CAT. NO.
SMALL	8066150-170
LARGE	8066150-171

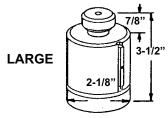
#### **DIE HOLDERS**

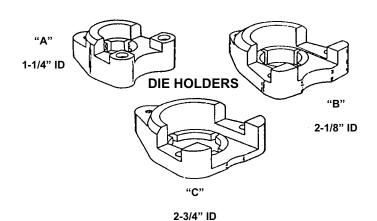
**PUNCH HOLDERS** 

903 SERIES	CAT. NO.
Α	8066150-280
В	8166150-280
С	8266150-280

#### **TURRET SPECIFICATIONS**

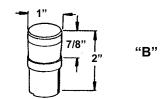
NUMBER OF STATIONS	DIE HOLDER	ROUND DIAM. SIZE RANGE
12	А	0" – 3/4"
5	В	49/64" – 1 7/16"
1	С	1-15/32" – 2"

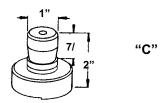




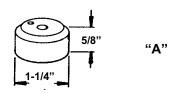
### KEYED TURRET PUNCHES & DIES 903 SERIES

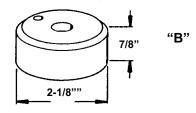
# PUNCHES 1" 7/8" 2" "A"

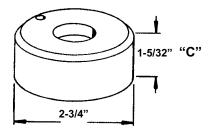




#### **DIES**







### **ROUND** PUNCHES

STYLE	SIZE	CAT. NO.
Α	.063"750" .	902010-000
В	.751" – 1.000"	902010-000
В	1.001" – 1.4375"	902012-000
С	1.438" – 2.000"	902014-000

### **DIES**

STYLE	MAX DIAM.	O.D.	CAT. NO.
Α	.758"	1.250"	901030-000
В	1.008"	2.125"	901032-000
В	1.445"	2.125"	901032-000
С	2.008"	2.750"	901034-000

### STANDARD SHAPED SERIES PUNCHES

STYLE	DIAG. DIMENSION	CAT. NO.
Α	.063"750"	903050-xxx
В	.751" - 1.000"	903052-xxx
С	1.001" - 1.500"	903054-xxx
C	1 501" - 2 000"	903056-xxx

#### **DIES**

STYLE	MAX DIAG.	O.D.	CAT. NO.
Α	.758"	1.250"	903070-xxx
В	1.008"	2.125"	903072-xxx
В	1.445"	2.125"	903072-xxx
С	2.008"	2.750"	903074-xxx

Common Shape - P.O.R.

### K-PRENE ® URETHANE STRIPPERS ROUNDS

STATION	SIZE	CAT. NO.
Α	.375"	8902150-800
Α	.750"	8002150-800
В	1.000"	8102150-800
B & C	1.500"	8202150-800

### **SHAPES**

STATION	SIZE	CAT. NO.
А	.375"	8302150-800
А	.750"	8402150-800
В	1.125"	8502150-800
B & C	1.500"	8602150-800

### 905 SERIES ADJUSTABLE PUNCHES & DIES

905 punches and dies are designed for use in Di-Acro Adjustable Die Sets. 905 punches are manufactured without a center point, and do not offer shear. However, this series tooling will adapt to Di-Acro punch presses and other competitive machines  $(3.500^{\circ})$  shut height  $-1.1/2^{\circ}$  die height).

### **ROUND**

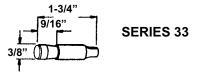
#### **PUNCHES**

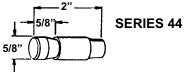
SERIES	SIZE	CAT. NO.
33	.063"375".	905010-000
44	.376"625"	905012-000
55	.626" — 1.000"	905014-000
66	1.001" - 1.750"	905016-000

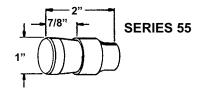
#### **DIES**

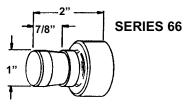
MAX DIAMETER	O.D.	CAT. NO.
.390"	.625"	905030-000
.640"	1.000'	905032-000
1.015"	1.500"	905034-000
1.765"	2.250"	905036-000

#### **PUNCHES**









### STANDARD SHAPED SERIES

#### **PUNCHES**

SERIES	DIAGONAL DIMENSION	CAT. NO.
33	.063"375"	905050-xxx
44	.376"625"	905052-xxx
55	.626" — 1.000"	905054-xxx
66	1.001" - 1.750"	905056-xxx

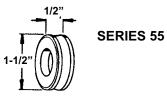
### DIES

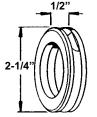
MAX DIAGONAL	O.D.	CAT. NO.
.390"	6.25"	905070-xxx
.640"	1.000"	905072-xxx
1.015'	1.500"	905074-xxx
1.765"	2.250"	905076-xxx

Common Shape - P.O.R.

# DIES 1/2" 5/8" 0) SERIES 33







**SERIES 66** 

### REPLACEMENT TOOLING 905 SERIES & ACCESSORIES



### **K-PRENE ® URETHANE STRIPPERS**

Can be use where individual stripper are preferred. K-Prene® stirppers are recommended for use on 3/8" (Series 33) and 5/8" (Series 44) shank punches only. Strippers, slipped over punch shank, can be easily removed.

CAT. NO.
8905923-300
8905924-400



### **PUNCH HOLDERS**

01101111
CAT. NO.
8905178-330
8905178-440
8905178-550

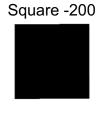


### **DIE HOLDERS**

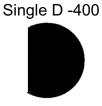
CAT. NO.
8905148-330
8905148-440
8905148-550
8901548-660

### STANDARD SHAPED SERIES

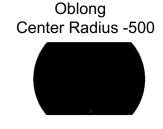
Rectangle -300



Round -000



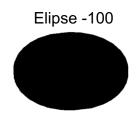
Oblong -550



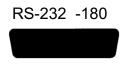


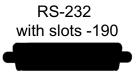
**COMMON SHAPED SERIES** 

Corner





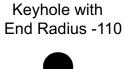


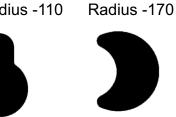


Keyhole -950



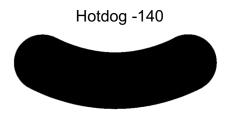
Double Keyhole

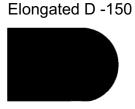






Teardrop -130







### **COMMON SHAPED SERIES**

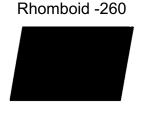
Pentagon -210 Rhombus -250

Heptagon -220













Equilateral Triangle -290



Right Triangle -310





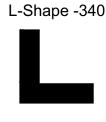


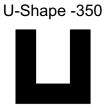
Isosceles

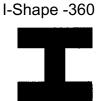












Cutler-Hammer™ -370





